

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 553653263 US, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: January 28, 2005.

Docket No.: BRMZ-P02-004

(PATENT)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Nicole Lesley Prokopishyn

Confirmation No.: 7139

Application No.: 10/501856

Art Unit: 1638

Filed: November 29, 2004

Examiner: Not Yet Assigned

For:

SHORT FRAGMENT HOMOLOGOUS

January 28, 2005

RECOMBINATION TO EFFECT

TARGETED GENETIC ALTERATIONS IN

**PLANTS** 

## **INFORMATION DISCLOSURE STATEMENT (IDS)**

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned (37 CFR 1.97(b)(3)).

A copy of each reference on the PTO/SB/08 is attached, except the U.S. patents. Applicants note that reference "BF" is a PCT application written in French. Applicants are not in possession of an English translation and therefore are not required to provide one to the office in accordance with CFR 1.98(a)(3)(ii). However, reference "AB" is a U.S. patent granted based on the national stage filing of the PCT application.

PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
and to a collection of information unless it displays a valid OMB control purpose. the Paperwork Reduction Act of 1995, no persons are required to resp

## **TRANSMITTAL FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

ond to a collection of information	i uniess it displays a valid OMB control numbe
Application Number	10/501856
Filing Date	November 29, 2004
First Named Inventor	Nicole Lesley Prokopishyn
Art Unit	1638
Examiner Name	Not Yet Assigned
Attorney Docket Number	BRMZ-P02-004

	ENCLOSURES (Check all that apply)				
Fee Transi	mittal Form	Drawing(s)		After Allowance Communication to TC	
Fee	Attached	Licensing-related Papers		Appeal Communication to Board of Appeals and Interferences	
Amendmei	nt/Reply	Petition	ļ	Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)	
After	Final	Petition to Convert to a Provisional Application		Proprietary Information	
Affid	avits/declaration(s)	Power of Attorney, Revocati Change of Correspondence		Status Letter	
Extension	of Time Request	Terminal Disclaimer		X Other Enclosure(s) (please Identify below):	
Express Al	bandonment Request	Request for Refund		SB/08 Copy of references BA-BF and CA-	
x Information	n Disclosure Statement	CD, Number of CD(s)		CZ Return Receipt Postcard	
Certified C Document	opy of Priority (s)	Landscape Table on CD			
	issing Parts/	Remarks			
	y to Missing Parts under FR 1.52 or 1.53				
	SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT				
Firm Name ROPES & GRAY LLP					
Signature	Signature Sp. A. A. A. A.				
Printed name	Ignacio Perez de la Cruz				
Date	January 28, 2005		Reg. No.	55,535	

			ce as Express Mail, Airbill No. EV 553653263 US, 450, Alexandria, VA 22313-1450, on the date
shown below.	Pi	$\Omega$	
Dated: <u>January 28, 2005</u>	_Signature: Linda	islake	_ (Linda Blake)

Application No.: 10/501856 Docket No.: BRMZ-P02-004

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. BRMZ-P02-004. A duplicate copy of this paper is enclosed.

Dated: January 28, 2005

Respectfully submitted,

Ignacio Perez de la Cruz
Registration No: 55 535

Registration No.: 55,535 ROPES & GRAY LLP 45 Rockefeller Plaza

New York, NY 10111-0087

(212) 497-3613

(212) 497-3650 (Fax)

Attorneys/Agents For Applicant

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0331
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/B/PTO Application Number 10/501856 INFORMATION DISCLOSURE November 29, 2004 Filing Date STATEMENT BY APPLICANT First Named Inventor Nicole Lesley Prokopishyn Art Unit (Use as many sheets as necessary) Examiner Name Not Yet Assigned BRMZ-P02-004 1 2 Attorney Docket Number Sheet

	U.S. PATENT DOCUMENTS					
		Publication Date MM-DD-YYYY		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	AA	6,010,908	01-04-2000 Gruenert et al.			
	AB	6,566,587	05-20-2003 Lebrun et al.			

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ <sup>6</sup>
	ВА	WO 99/07865	02-18-1999	Kimaragen, Inc.		
	BB	WO 99/25853	05-27-1999	Pioneer Hi-Bred International,		
				Inc.		L.
	ВС	WO 98/54330	12-03-1998	Zeneca Limited		
	BD	WO 97/04103	02-06-1997	Rhone-Poulenc Agrochimie		
	BE	WO 01/85969 A2	11-15-2001	Pioneer Hi-Bred International,		
	<b>l</b> .			Inc.		
	BF	WO 99/25821	05-27-1999	Pioneer Hi-Bred International,		
	1			Inc.	ļ	l

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Ener Office that issued the document, by the two-letter code (WIPO Standard ST.3). In Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. In Japanese symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	<b>T</b> ²
	CA	GAMPER, et al., 2000, The DNA strand of chimeric RNA/DNA oligonucleotides can direct gene repair/conversion activity in mammalian and plant cell-free extracts, Nucleic Acids Research 28, 4332-39	
	СВ	NASSAL, M. et al., 1990, PCR-based site-directed mutagenesis using primers with mismatched 3'-ends, Nucleic Acids Research 18, 3077-8	
,	СС	HEMSLEY, A., et al., 1989, A simple method for site-directed mutageneis using the polymerase chain reaction, Nucleic Acids Research 17, 6545-51	·
	CD	COOK, A.F., et al., 1988, Synthesis and hybridization of a series of biotinylated oligonucleotides, Nucleic Acids Research 16, 4077-95	
	CE	CONNOLLY, B.A., 1988, The synthesis of oligonucleotides containing a primary amino group at the 5'-terminus, Nucleic Acids Research 15, 3131-9	
	CF	PERRIN, S. et al., 1990, Site-specific mutagenesis using asymmetric polymerase chain reaction and a single mutant primer, Nucleic Acids Research 18, 7433	
	CG	HOHN, B. et al, 1999, Gene therapy in plants, PNAS 96, 8321-23	•
	СН	REISS, B. et al, 1999, RecA protein stimulates homologous recombination in plants, PNAS 93, 3094-98	
	CI	SHAVEL, G. et al., 1999, Stimulation of homologous recombination in plants by expression of the bacterial resolvase RuvC, PNAS, 7398-02	

Examiner	Date	
Signature	Considered	

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/B/PTO Application Number 10/501856 INFORMATION DISCLOSURE November 29, 2004 Filing Date STATEMENT BY APPLICANT Nicole Lesley Prokopishyn First Named Inventor Art Unit (Use as many sheets as necessary) Not Yet Assigned Examiner Name 2 BRMZ-P02-004 2 Attorney Docket Number Sheet

	CJ	REISS, B. et al., 2000, RecA stimulates sister chromatid exchange and the fidelity of double-	
		strand break repair, but not gene targeting, in plants transformed by Agrobacterium, PNAS 97,	
		3358-63	
1	CK	ZHU, T. et al., 1999, Targeted manipulation of maize genes in vivo using chimeric RNA/DNA	
		oligonucleotides, PNAS 97, 3358-63	
1	CL	BEETHAM, P.R. et al., 1999, A tool for functional plant genomics: Chimeric RNA/DNA	
		oligonucleotides cause in vivo gene-specific mutations, PNAS 96, 8774-78	
	СМ	YUSIBOV, V.M., 1994, Association of single-stranded transferred DNA from Agrobacterium	
		tumefaciens with tobacco cells, PNAS 91, 2994-98	
i	CN	HANSEN, G. et al., 1997, T-strand integration in maize protoplasts after codelivery of a T-DNA	
		substrate and virulence genes, PNAS 94, 11726-30	
	CO	DOETSCHMAN, T., et al., 1997, Targetted correction of a mutant HPRT gene in mouse	
		embryonic stem cells, Nature 330, 576-78	
	CP	THOMAS, K.R. et al., 1987, Site-Directed Mutagenesis by Gene Targeting in Mouse Embryo-	
		Derived Stem Cells, Cell 51, 503-12	_
	CQ	KEMPIN, S.A. et al., 1997, Targeted disruption in Arabidopsis, Nature 389, 802-3	
	CR .	OH T. et al., 2001, Oligonucleotide-directed plant gene targeting, Curr. Op. Biotech. 12, 169-	
		172	
1	CS	MENGISTE, T. et al., 1999, Prospects for the Precise Engineering of Plant Genomes by	
		Homologous Recombination, Biol. Chem. 380, 749-58	
l	СТ	ZHU, T. et al., 2000, Engineering herbicide-resistant maize using chimeric RNA/DNA	
		oligonucleotides, Nature Biotech. 18, 555-558	
	CU	KAPSA, R. et al., 2001, In Vivo and in Vitro Correcton of the mdx Dystrophin Gene Nonsense	
		Mutation of Short-Fragment Homologous Replacement, Human Gene Therapy 12, 629-42	
	CV	COLOSIMA, A. et al., 2001, Targeted Correction of a Defective Selectable Marker Gene in	
		Human Epithelial Cells by Small DNA Fragments, Mol. Therapy Vol. 3, No. 3	
	CW	GONCZ, K.K. et al., 1998, Targeted replacement of normal and mutant CFTR sequences in	
		human airway epithelial cells using DNA fragments, Hum. Mol. Genetics 7, 1913-19	
1	CX	KUNZELMANN, K. et al., 1996, Gene targeting of CFTR DNA in CF epithelial cells, Gene	
		Therapy 3, 859-867	
	CY	HANSEN, G. et al., 1993, "Agrolistic" transformation of plant cells: Integration of T-strands	
		generated in planta, PNAS 93, 14978-83	
	CZ	LANDT, O. et al., 1990, A general method for rapid site-directed mutagenesis using the	
		polymerase chain reaction, Gene 96, 125-8	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	· _	
Examiner		Date
Signature		Considered

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

plication No. (if known): 10/501856

Attorney Docket No.: BRMZ-P02-004

## Certificate of Express Mailing Under 37 CFR 1.10

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 553653263 US in an envelope addressed to:

> MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

January 28, 2005 Date

Linda A	Blake
Sign	nature
Linda	Blake
Typed or printed name of	f person signing Certificate
·	212-841-5700
Registration Number, if applicable	Telephone Number

Note:

Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

IDS (Citation) by Applicant (2 pages) Copy of references BA-BF and CA-CZ (32 references)